UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,629	12/12/2001	Wilhelm Rademacher	50061	9694

26474 7590 08/31/2009

NOVAK DRUCE DELUCA + QUIGG LLP
1300 EYE STREET NW
SUITE 1000 WEST TOWER
WASHINGTON, DC 20005

EXAMINER
PRYOR, ALTON NATHANIEL

ART UNIT	PAPER NUMBER
1616	

MAIL DATE	DELIVERY MODE
08/31/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/009,629	RADEMACHER ET AL.	
	Examiner	Art Unit	
	ALTON N. PRYOR	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6,7,9-12,14 and 15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6,7,9-12,14,15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's arguments filed 8/13/09 have been fully considered but they are not persuasive. See argument below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4,6,7,9-12,14,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motojima et al (USPN 4866201; 9/12/89). Motojima et al suggests a method of regulating the growth of ornamental plants as well as plant fruiting (column 20 line 25) comprising applying to the ornamental plants or fruit plant (orchard) a composition comprising instant compounds of formula I. See abstract, column 20 lines 45-63. Motojima et al does not teach an invention comprising specifically treating hop and grapevine plants or an invention comprising increasing amounts of flavonoids and other phenolic compounds in said plants. Note, an ornamental plant is hop plant and a grape plant is a fruit plant. Also note, the instant step of applying the compound of formula I to the hop and/or grapevine plant in the claim is also carried out by Motojima et al; thus, it obvious that the flavonoids and other phenolic compounds would increase in the ornamental and fruit plants of Motojima et al. According to KSR, it would have been obvious to try applying the instant compound of formula I to any ornamental plant and any fruit plant,

including the hop plant and grapevine plant as claimed, since Motojima et al. teach broadly the application of the compound of formula I to ornamental plants and fruit plants.

The results in the declaration and specification do not appear to be directed to a showing of increasing of flavonoids in hop and grapevine plants following treatment with the instant compound of formula I. Which flavonoids and phenolic compounds are increased following the treatment of hop and grapevine plants with instant compounds of formula I? Please clarify. According to KSR, it would have been obvious to try applying the instant compound of formula I to any ornamental plant and any fruit plant, including the hop plant and grapevine plant as claimed, since Motojima et al. teach broadly the application of the compound of formula I to ornamental plants and fruit plants.

The Examiner does not understand why the Roemmetlt et al. reference (Phytochemistry, 64, 2003, 709-716) it attached to the declaration. The reference is to the treatment of apple trees rather than hop plants as claimed. Please clarify.

Claims 1,2,10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazawa et al (USPN 5015283; 5/14/91). Miyazawa et al suggests a method of regulating the growth of ornamental plants comprising applying to the ornamental plants a composition comprising instant compounds of formula I. See abstract, column 1 line 39 – column 2 line 45. Miyazawa et al does not teach an invention comprising specifically treating hop plants or an invention comprising increasing amounts of flavonoids and other phenolic compounds. Note, ornamental plants are hop plants. Also note, the step of applying the compound of formula I to the hop plant in the claim is also carried out by Miyazawa; thus, it obvious that the flavonoids and other phenolic compounds would increase in the ornamental plants of Miyazawa. According

to KSR, it would have been obvious to try applying the instant compound of formula I to any ornamental plant, including the hop plant as claimed, since Miyazawa et al. teach broadly the application of the compound of formula I to ornamental plants.

Claims 1-4,6,7,9-12,14,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al (USPN 6022831; 2/8/00). Evans et al suggests a method treating fruit trees such as apple and pears trees to control fireblight comprising applying to the fruit trees a composition comprising instant compounds of formula I. See abstract, column 2 line 60- column 5 line 13. Evans et al do not teach an invention comprising grapevine plants or an invention comprising increasing amounts of flavonoids and other phenolic compounds. Note, grapevine plants are fruit trees. Also note, the step of applying the compound of formula I to the fruit tree in the claim is also carried out by Evans et al; thus, it is obvious that the flavonoids and other phenolic compounds would increase in the fruits of Evans et al. Evans et al. do not specify grape trees (vines) as recited in the claims. However, absent a showing of unexpected results for specific fruit trees such as grapevine plants, it would have been obvious to expect that the application of the compounds to any fruit tree, including grapevine claimed, would have resulted in the regulation of the tree's growth. Since Evans et al teach the treatment of fruit trees with instant compound of formula I, it would have been obvious to try treating any fruit treat, including the grape tree or vines, with the instant compound of formula. According to KSR, it would have been obvious to try applying the instant compound of formula I to any fruit plant, including the grapevine plant as claimed, since Evans et al. teach broadly the application of the compound of formula I to fruit plants.

The results in the specification do not appear to be directed to a showing of increasing of flavonoids in grape plants or vines following treatment with the instant compound of formula I. Which flavonoids and phenolic compounds are increased following the treatment of grape plants or vines with instant compounds of formula I? Please clarify. According to KSR, it would have been obvious to try applying the instant compound of formula I to any fruit plant, including the grapevine plant as claimed, since Evans et al. teach broadly the application of the compound of formula I to fruit plants.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alton N. Pryor/
Primary Examiner, Art Unit 1616